

5. A method of providing frequency modulation within radio-frequency pulses transmitted by an antenna having series inductance and capacitance, that comprises, connecting a solid-state four-terminal rectifier bridge having two pairs of opposing bridge terminals with one pair of said terminals in shunt with said antenna inductance and capacitance; interposing series-connected saturable and linear inductors and an SCR switch between the other pair of opposing bridge circuit terminals; and high-speed triggering the SCR on to effect corresponding high-speed frequency increasing or decreasing of the frequency within the radio-frequency pulse to provide the desired frequency modulation therein.

6. The method of claim 5 wherein the radio-wave pulses are Loran-C navigation pulses.

7. The method of claim 6 wherein the SCR is triggered in accordance with digital bits comprising communication to be added to the Loran-C navigation transmission and without impacting the navigation utilization thereof.